Amendments to the Claims

Please amend the claims as follows.

Claims 1 – 29 (Cancelled)

30. (Currently amended).   A method for reducing interference from at least one narrow band interferer in a pilot symbol assisted receiver comprising the steps of;

receiving a stream of received data,

passing the stream of received data through an adaptive filter that reduces interference from any narrowband interferer,

passing the filtered data through a correlator arranged to detect pilot symbols,

when a pilot symbol is detected passing the stream of received data to a receiving apparatus without first passing the received data through the adaptive filter,

and wherein the pilot symbol has a length and includes one or more repetitions of known data or pseudo noise.

31. (Currently amended).   A method for reducing interference from at least one narrow band interferer in a pilot symbol assisted receiver as claimed in claim 30 wherein the adaptive filter has a number of taps and the number of taps in the adaptive filter is greater than the a maximum number of interferers to be cancelled.

32. (Currently amended).   A method for reducing interference from at least one narrow band interferer in a pilot symbol assisted receiver as claimed in claim 30 wherein the adaptive filter uses a delayed stream of the received data delayed by a known length as a reference signal.

33. (Original). A method for reducing interference from at least one narrow band interferer in a pilot symbol assisted receiver as claimed in claim 32 wherein the length of the delay in the delayed stream of received data is longer than the length of the pilot symbol.

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34. (Currently amended).   A method for reducing interference from at least one narrow band interferer in a pilot symbol assisted receiver as claimed in claim 30 wherein the step of detecting a~~ the~~ pilot symbol in the correlator comprises the steps of;

> detecting a peak in a sliding correlator and,

> when the peak is detected in the sliding correlator operating a pilot symbol detector to detect the pilot symbol.

35. (Currently amended).   A method for reducing interference from at least one narrow band interferer in a pilot symbol assisted receiver as claimed in claim 34 wherein the step of detecting a pilot symbol further comprises the step of timing out if ~~a~~ the pilot symbol is not detected in the pilot symbol detector within a predetermined number of operations.

36. (Currently amended).   A method for reducing interference from at least one narrow band interferer in a pilot symbol assisted receiver as claimed in claim 6 wherein when ~~a~~ the timeout occurs continuing to search for a peak with the sliding window correlator and when a peak is detected in the sliding window correlator operating ~~a~~ the pilot symbol detector to detect the pilot symbol.

37. (Currently amended).   A method for detecting a pilot symbol in the presence of narrowband interference in a receiver comprising the steps of;

> receiving a stream of received data,

> passing the stream of received data through an adaptive filter to reduce interference from any narrowband interferers,

> passing the output of the adaptive filter to a correlator,

> when the correlator produces a peak over a threshold value triggering a pilot symbol detector to search for a pilot symbol in the filtered data,

> triggering a timeout during which the pilot symbol detector will not operate if the pilot symbol detector does not detect a pilot symbol in the filtered data ~~without~~ within a predetermined number of operations, and

sending a signal that triggers removal of the adaptive filter from ~~the~~ a receiver path if the pilot symbol detector detects a pilot symbol in the filtered data within ~~the~~ a predetermined number of second correlator operations,

and wherein the pilot symbol includes one or more repetitions of known data or pseudo noise sequence.

38. (Original) A method for detecting a pilot symbol in the presence of narrowband interference in a receiver as claimed in claim 37 wherein the pilot symbol detector is a matched filter correlator.

39. (Currently amended).   A method for detecting a pilot symbol in the presence of narrowband interference in a receiver as claimed in claim 37 wherein ~~the~~ a number of taps in the adaptive filter is greater than the a maximum number of interferers to be cancelled.

40. (Original) A method for detecting a pilot symbol in the presence of narrowband interference in a receiver as claimed in claim 37 wherein the adaptive filter uses a delayed stream of the received data as a reference signal.

41. (Currently amended).   A narrowband interference reducing system for a receiver comprising;

a front end arranged to receive data,

an adaptive filter arranged to filter narrowband interference from the received data and provide filtered data,

a correlator arranged to detect pilot symbols in the filtered data, and

a logic system arranged to reroute the received data to a receiving apparatus when a pilot symbol has been detected, and wherein

the pilot symbol has a length and includes one or more repetitions of known data or pseudo noise sequence.

42. (Currently amended).   A narrowband interference reducing system for a receiver as claimed in claim 41 wherein ~~the~~ a number of taps in the adaptive filter is greater than ~~the~~ a maximum number of interferers to be cancelled.

43. (Currently amended).   A narrowband interference reducing system for a receiver as claimed in claim 41 wherein the adaptive filter uses a delayed stream of the received data delayed by a known length as a reference signal.

44. (Currently amended).   A narrowband interference reducing system for a receiver as claimed in claim ~~41~~ 43 wherein the length of the delay in the delayed stream of received data is longer than the length of the pilot symbol.

45. (Original) A narrowband interference reducing system for a receiver as claimed in claim 41 further comprising a matched filter correlator.

46. (Currently amended).   A narrowband interference reducing system for a receiver as claimed in claim 45 wherein when a peak is detected in ~~the~~ a sliding correlator operating the matched filter correlator to detect the pilot symbol.

47. (Currently amended).   A narrowband interference reducing system for a receiver as claimed in claim 45 wherein the logic system is arranged to produce a timeout if ~~a~~ the pilot symbol is not detected in the matched filter correlator within a predetermined number of matched filter correlator operations.

48. (Original) A narrowband interference reducing system for a receiver as claimed in claim 47 wherein when a timeout occurs the sliding window correlator continues operating and when a peak is detected in the sliding window correlator the matched filter correlator begins operating.

49. (Original) A narrowband interference reducing system for a receiver as claimed in claim 48 wherein the logic system is arranged to bypass the adaptive filter when the matched filter correlator detects a pilot symbol.